

Title (en)  
NOVEL ATTENUATED PSEUDOMONAS AERUGINOSA STRAINS

Title (de)  
NEUARTIGE ABGESCHWÄCHTE STÄMME VON PSEUDOMONAS AERUGINOSA

Title (fr)  
NOUVELLE SOUCHE DE PSEUDOMONAS AERUGINOSA ATTENUÉE

Publication  
**EP 0702564 B1 20000301 (EN)**

Application  
**EP 94917176 A 19940602**

Priority

- KR 9400062 W 19940602
- KR 930010273 A 19930607
- KR 930010281 A 19930607

Abstract (en)

[origin: WO9428928A1] The present invention relates to novel safe attenuated *Pseudomonas aeruginosa* strains obtained by isolating *Pseudomonas aeruginosa* in a pure state according to Fisher-Devlin immunotype and then repeatedly purifying the isolated strain, particularly CFCPA 10142 (KCCM 10029), CFCPA 20215 (KCCM 10030), CFCPA 30720 (KCCM 10031), CFCPA 40057 (KCCM 10032), CFCPA 50243 (KCCM 10033), CFCPA 60534 (KCCM 10034) and CFCPA 70018 (KCCM 10035) strains. In addition, the present invention relates to a vaccine for immunization against *Pseudomonas aeruginosa* infection which includes cell wall proteins having molecular weight ranging from 10,000 to 100,000, obtained from the attenuated *Pseudomonas aeruginosa* strains, a therapeutic agent for treating *Pseudomonas aeruginosa* infection containing immunoglobulin(s) induced by the cell wall proteins in an experimental animal, and methods of their preparation. The cell wall protein component of the attenuated strain is non-pathogenic and safe and exhibits excellent antibody formation and is useful for preparation of a vaccine and therapeutic agent. The cell wall proteins exhibit an excellent cross-protective capacity for various *Pseudomonas aeruginosa* strains and a superior antibody inducing property.

IPC 1-7  
**A61K 39/104; C12N 15/31**

IPC 8 full level  
**C12N 1/20** (2006.01); **A61K 35/74** (2006.01); **A61K 39/104** (2006.01); **A61K 39/395** (2006.01); **A61K 39/40** (2006.01); **A61P 31/04** (2006.01); **C07K 14/21** (2006.01); **C07K 16/12** (2006.01); **C12N 1/00** (2006.01); **C12N 15/31** (2006.01); **A61K 39/00** (2006.01); **C12R 1/385** (2006.01)

CPC (source: EP US)  
**A61K 39/104** (2013.01 - EP); **A61P 31/04** (2018.01 - EP); **C07K 14/21** (2013.01 - EP); **C07K 16/1214** (2013.01 - EP); **A61K 39/00** (2013.01 - EP US)

Designated contracting state (EPC)  
BE FR IT

DOCDB simple family (publication)  
**WO 9428928 A1 19941222**; AT 408445 B 20011126; AT A900694 A 20010415; AU 676575 B2 19970313; AU 6857194 A 19950103; CA 2141871 A1 19941222; CA 2141871 C 19990511; CH 687233 A5 19961031; CN 1112356 A 19951122; DE 4447677 C2 19980723; DE 4493997 C2 19970717; DE 4493997 T1 19951005; EP 0702564 A1 19960327; EP 0702564 B1 20000301; ES 2074968 A1 19950916; ES 2074968 B1 19960501; GB 2285925 A 19950802; GB 2285925 B 19970409; GB 9502373 D0 19950329; JP 2911603 B2 19990623; JP H09501826 A 19970225; NL 194910 B 20030303; NL 194910 C 20030704; NL 9420005 A 19950601; NO 317148 B1 20040830; NO 950421 D0 19950206; NO 950421 L 19950407; RU 2155226 C2 20000827; SE 507114 C2 19980330; SE 9500418 D0 19950206; SE 9500418 L 19950407; TW 403655 B 20000901

DOCDB simple family (application)  
**KR 9400062 W 19940602**; AT 900694 A 19940602; AU 6857194 A 19940602; CA 2141871 A 19940602; CH 45495 A 19940602; CN 94190491 A 19940602; DE 4447677 A 19940602; DE 4493997 A 19940602; DE 4493997 T 19940602; EP 94917176 A 19940602; ES 9550003 A 19940602; GB 9502373 A 19940602; JP 50159395 A 19940602; NL 9420005 A 19940602; NO 950421 A 19950206; RU 95113158 A 19940602; SE 9500418 A 19950206; TW 83105105 A 19940604